

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OKLAHOMA**

STATE OF OKLAHOMA, *et al.*,)

Plaintiffs,)

v.)

Case No. 4:05-cv-00329-GKF-PJC

TYSON FOODS, INC., *et al.*,)

Defendants.)

**DEFENDANTS' REPLY IN SUPPORT OF MOTION TO EXCLUDE DR. ROGER
OLSEN'S PRINCIPAL COMPONENT ANALYSIS TESTIMONY (Dkt. No. 2082)**

Defendants respectfully submit this reply brief in support of their motion to exclude Dr. Roger Olsen's PCA testimony. *See* Dkt. No. 2082 (May 18, 2009) ("Mot." or "Motion"). Dr. Olsen's work is novel, inconsistent, based on unreliable data, and unreviewed by anyone outside of Plaintiff's legal team. *See generally id.* Plaintiffs' response, Dkt. No. 2198 (June 5, 2009) ("Opposition" or "Opp."), fails to address many of the criticisms raised in the Motion. Despite volumes of new declarations and analyses, the Opposition underscores the shifting bases for Dr. Olsen's work and the unreliability inherent in his methodology. Because Dr. Olsen's PCA analysis would simply confuse the jury, it should be excluded. *See* Fed. R. Evid. 702.

A. Plaintiffs' New Analyses and Undisclosed Witnesses Merit No Weight

Plaintiffs' Opposition is not so much a legal brief as a table of contents directing the Court to wade through 101 pages of declarations to deduce Plaintiffs' responses.¹ Plaintiffs defend Dr. Olsen not with his Rule 26 report but rather with new analyses conducted after the expert deadline and the vouchsafe of newly disclosed consultants. Neither is appropriate.

First, the Chappell and Loftis declarations merit no consideration. As explained in Defendants' pending motion to strike, Dkt. No. 2241 (June 17, 2009), the Rule 26(a)(2) expert discovery requirements apply equally to *Daubert* motions as to trial testimony. *See Honaker v. Innova*, 2007 U.S. Dist. LEXIS 30222, at **2-3 (W.D.K.Y. Apr. 23, 2007); *Palmer v. ASARCO Inc.*, 2007 WL 2254343, at **2-4 (N.D. Okla. Aug. 3, 2007). The *Daubert* inquiry allows a party to probe the bases for an opposing expert's opinions through discovery before challenging them in court. But here, Defendants have had no opportunity to test Dr. Chappell's or Dr. Loftis's opinions or their bases. *See* Opp. Exs. D & E. The Court is asked to accept their *ipse*

¹ Plaintiffs' declarations, if allowed at all, should be considered only to the extent actually discussed in their Opposition. *United States v. Heijnen*, 215 Fed. Appx. 725, 727 (10th Cir. 2007); *see Gaines-Tabb v. ICI Explosives, USA, Inc.*, 160 F.3d 613, 623-624 (10th Cir. 1998).

dixit that Dr. Olsen’s work is reliable without any inquiry into their own reliability, motives, or affiliations. Indeed, as set out in Defendants’ Opposition to Plaintiffs’ motion to bar Dr. Cowan’s testimony, Dr. Chappell not only reviewed Dr. Olsen’s PCA, but in fact executed a substantial portion of it. *See* Dkt. No. 2163, at 15-16 (June 5, 2009). Such experts cannot be sprung for the first time at the *Daubert* stage to shore up another expert’s testimony. *Dura Auto. Sys. v. CTS Corp.*, 285 F.3d 609, 612-17 (7th Cir. 2002).²

Second, the Court should put aside the new analyses offered by each declarant. The Court has repeatedly barred Plaintiffs from supplementing their experts’ opinions. *See* Opinion & Order, Dkt. No. 1787 (noting that multiple supplements were “extremely unfortunate” and “detrimental to the timely resolution of this case”); Opinion & Order, Dkt. No. 1839 (denying Plaintiffs’ Motion to supplement Cooke & Welch report); Opinion & Order, Dkt. No. 1989 (rejecting Plaintiffs’ efforts to supplement expert reports through deposition exhibits). Yet, Dr. Chappell’s and Dr. Loftis’s reports shoring up Dr. Olsen’s work are completely new. *See, e.g.*, Opp. Ex. D ¶18 (discussing new “sensitivity analysis”), ¶27 (offering new opinions regarding cattle); ¶28 (declaring Olsen’s math error had no effect); Ex. E ¶9 (explaining work likely performed by Dr. Chappell); ¶10 (declaring Dr. Olsen’s errors to have been “minor”). And both Dr. Olsen and Dr. Fisher offer new fieldwork and analysis conducted after the expert deadline and their depositions. *See, e.g.*, Mot. at 4 n.1; Opp. Ex. A ¶¶23-25; Opp. Ex. H ¶¶11-12, 17-20. Plaintiffs cannot once again shift their expert case.

B. Dr. Olsen’s Novel Methodology Has Not Been Peer As Discussed in *Daubert*

² Dr. Loftis’s declaration similarly requires scrutiny. For example, the bases for many of his opinions are unclear, especially as to his knowledge of what Dr. Olsen did or did not do. His degrees are in agricultural engineering, not statistics and he mentions no experience with PCA. *See* Opp. Ex. D ¶1. He also confuses basic mathematical principles, “log transformation” and “lognormal distribution,” which while similar sounding are entirely separate concepts. *Compare id.* ¶¶15-16, with Ex. 1 (Cowan Dep.) at 177:3-181:17.

As previously demonstrated, Dr. Olsen’s “poultry signature” was devised solely for this litigation, and has never been confirmed by anyone not connected with Plaintiffs’ litigation team. *See Mot.* at 5-8.³ Plaintiffs now attempt to establish some pedigree for Dr. Olsen’s analysis.

First, Plaintiffs argue that *Daubert* goes only to an experts’ methodology generally, not to its application and to conclusions in a particular case. *See Opp.* at 4-5. That is incorrect. In fact, the Tenth Circuit rejected this very argument when Plaintiffs pressed it on appeal, holding that an experts’ testimony is unreliable “whether [it] completely changes a reliable methodology or merely misapplies that methodology.” *Attorney General of Oklahoma v. Tyson Foods*, 565 F.3d 769, 780 (10th Cir. 2009) (quotations omitted); *see Mot.* at 9 (citing additional authorities).

Second, there is no dispute that PCA has been applied in some contexts to study environmental contamination. *See Opp.* at 6-7. Indeed, Dr. Johnson authored a textbook chapter regarding the use of PCA in environmental forensics. *See Ex. 2*. However, the fact that PCA has been used by others is no license to misapply it. *See, e.g., Ex. 3 (Johnson Dep.)* at 501:10-506:25. For example, PCA “works best in simple cases, where there are few sources contributing to the system, and there is limited mixing between sources.” *Ex. 2* at 510. Yet, Dr. Olsen applies it to a million acre watershed with multiple sources of most of his PCA constituents. *See Mot.* at 18-19; *see also Ex. 4 (P.I.T.)* at 883:17-888:13. Dr. Olsen’s PCA is misconceived, and in any event Plaintiffs admit that despite decades of poultry research, he is the only person ever to see this “poultry signature.” *See Mot.* at 6-7; *Opp.* at 8 n.2.

³ Plaintiffs’ explanation of counsel’s September 2005 memorandum, *see Opp.* at 7-8, rings hollow given that Defendants first raised it nearly 18 months ago in opposing Plaintiffs’ preliminary injunction motion, *see Dkt. No. 1531* at 30 & *Ex. 2*, and specifically asked both Dr. Olsen and Dr. Harwood about it, *see P.I.T.* at 674:22-677:19, 833:21-835:12, yet only now do Plaintiffs offer this excuse. Moreover, the memorandum is problematic not because it proposes using certain tools to investigate the IRW, but because it forecasts the conclusions of those investigations before they were even begun. *See Mot.* at 7-8.

Third, Plaintiffs claim that Dr. Olsen’s PCA was “peer reviewed” by Dr. Loftis. *See* Opp. at 17-19. But this is not peer review as courts have used the term. Courts have rejected the lesser claim that review by opposing experts constitutes peer review.⁴ *See* Opp. at 17; *Honaker*, 2007 U.S. Dist. LEXIS 30222, at **4-5; *Gaskin v. Sharp Elec. Corp.*, 2007 U.S. Dist. LEXIS 65532, at *30 (N.D. Ind. Aug. 31, 2007) (rejecting “untenable” argument that review by opposing experts is “peer review.”). The hallmark of “peer review” is *independent* review. *See United States v. Frabizio*, 445 F. Supp. 2d 152, 166 (D. Mass. 2006); *In re Breast Implant Litig.*, 11 F. Supp. 2d 1217, 1230-31 (D. Colo. 1998). There is nothing “independent” about Dr. Loftis.⁵

C. Dr. Olsen’s Conclusions Are Subjective And Unreliable

Lastly, Plaintiffs’ defenses of Dr. Olsen’s work merely underscore his shifting rationales.

1. Dr. Olsen’s PCA relies on unreliable and biased data.

As Dr. Cowan has shown, Dr. Olsen based his PCA on a dataset that was arbitrarily constructed, maintained, and manipulated. *See* Mot. at 23-25. Contrary to Dr. Chappell’s claim, *see* Opp. at 10-11, Dr. Cowan did not “ignore” Dr. Olsen’s “queries” and “protocols.” Rather, as explained in Dr. Cowan’s report, those do not produce the data Dr. Olsen used for SW3. *See* Mot. Ex. 2 at 18; *see also* Dkt. No. 2163 at 12-15 & Ex. 7 (demonstrating instances in which SW3 contains data different from Plaintiffs’ Access database). Plaintiffs other citations are

⁴ Plaintiffs over-read *Daubert*, which stated not that publication is “one *type* of peer review” but “one *element* of peer review,” *i.e.* publication is preceded by examination and comment by independent peer reviewers. *See* Opp. at 17-18 (quoting *Daubert v. Merrell Pharm.*, 509 U.S. 579, 593-94 (1993) (emphasis added)). The Supreme Court certainly did not hold that unpublished review by a party’s own hired expert consultants equals “peer review.”

⁵ At any rate, Dr. Loftis’s “peer review” does not meet Defendants’ objections. Dr. Loftis essentially re-calculated Dr. Olsen’s PC scores using a different computer program, *see* Opp. Ex. D ¶¶14-17, a ministerial task that does not address the underlying problems in Dr. Olsen’s dataset or review his subjective conclusions based on the PC scores. Moreover, Dr. Loftis performed his analysis on SW15, not one of Dr. Olsen’s “important” runs upon which any conclusions were based. Mot. Ex. 2 at 6-54. And, interestingly, Dr. Loftis nowhere says that he actually agrees with Dr. Olsen’s conclusion that PC1 equals poultry impact.

irrelevant as neither Dr. Loftis nor Drs. Johnson and Murphy endeavored to reconstruct Dr. Olsen's PCA runs from the original data. *See* Opp. at 10 & Ex. D ¶14. Only Dr. Cowan did so, and his report stands unrebutted.

Plaintiffs' denial that Dr. Olsen effectively substituted means for missing data, *see* Opp. at 15, is odd given Dr. Olsen's admission to that effect in his report:

If one of the variables selected in a particular PCA run is missing a value ..., the product (coefficient times the standardized concentration) for that parameter is essentially not used in the summation: *this is the same as multiplying the coefficient by the standardized mean concentration which is zero.*

Mot. Ex. 2 at 6-53 (italics added). Dr. Loftis similarly admits that Dr. Olsen's use of Z-transformed data effectively replaces missing values with "a normal score value of Z=0 corresponding to the mean of the missing constituent." Opp. Ex. D ¶32. But this is subsidiary to Dr. Cowan's actual point that data substitution impacts the overall variability in the dataset. As explained by one paper Dr. Olsen cited in support of his own report, it can.

Missing data values may make the use of graphical water chemistry techniques impossible, or limit the quality of the statistical analyses. During the statistical analysis, most software packages replace those missing values with means of the variables, or prompt the user for case-wise deletion of analytical data, both of which are not desirable. *This can bias statistical analyses if these values represent a significant number of the data being analyzed.*

Güler, *et al.*, *Evaluation of Graphical and Multivariate Statistical Methods for Classification of Water Chemistry Data*, J. Hydro. 10:455, 459 (2002) (emphasis added).⁶

⁶ Relatedly, whether or not it is standard practice to average split samples, *see* Opp. at 15, a claim Dr. Cowan never disputes, Plaintiffs do not refute Dr. Cowan's point that doing so artificially reduces the overall variability in the dataset. *See* Mot. at 22. This is especially so where such "splits" result in dramatically different measurements. To pick but one example, sample "USGS-07196000:12/12/2007," which was part of the SW3 run, reported total coliform of 3053 and *E. coli* of 740. *See* Mot. Ex. 2 Apx. F. The coliform value was the average of measurements of 270 and 5800; the second averaged 180 and 1300. (Defendants have not attached the entire database but can produce the numbers if necessary). Similarly, contrary to Dr. Chappell's claim, Dr. Cowan never advocated replacing non-detect values with zero, which he in fact explained "wouldn't be possible." *Compare* Opp. Ex. E ¶18 with Ex. 1 (Cowan Dep.) at 114:7-24. Dr.

Plaintiffs are also conflicted over Dr. Cowan's analysis comparing Plaintiffs' and USGS's data. *See* Mot. at 23. Dr. Olsen claims to have worked with USGS to ensure that the data were "comparable and [could] be used together." Opp. Ex. A ¶29. Yet, Dr. Chappell states that because the two sets measured different portions of the IRW, they "would not be expected to be comparable in the first place." *Id.* Ex. E ¶19. It cannot be both. The fact is that these incompatible datasets should have been analyzed separately.⁷ *See* Mot. at 23.

2. Dr. Olsen's multiple PCA runs demonstrate the subjectivity of his analysis.

Dr. Olsen conducted his PCA in an arbitrary manner. *See* Mot. at 9-11. Plaintiffs argue that the multiple PC runs in his report were "sensitivity analyses" or for "investigatory analysis." Opp. at 10. But Plaintiffs make no mention of the hundreds of runs *not explained* in Dr. Olsen's report. *See* Ex. 4 (P.I.T.) at 890:10-14 (admitting hundreds of runs). Plaintiffs fail to explain Dr. Olsen's criteria for "important" runs. *See* Mot. at 9-10. They fail to explain Dr. Olsen's e-mail exchange with Dr. Chappell searching for a data combination that would separate cattle from poultry edge-of-field samples. *See* Mot. at 10 & Ex. 7 at 47-50.⁸ And they fail to explain Dr. Olsen's selective use of a third PC score to mask chemical similarities between cattle manure and soil in these solids samples. *Id.* at 10-11. In fact, Plaintiffs all but abandon Dr. Olsen's solids PCA runs, nowhere mentioning the "important" SD1 or SD6 runs, or the SW22 run that supported his cattle opinions. *See* Mot. at 9-10; Mot. Ex. 2 at 6-54.

Cowan's actual point is that using different detection limits skews the variability in the dataset. Dr. Loftis's declaration proves as much. He shows that Plaintiffs' log transformed data generally ranges from -4 to 4, such that a detection limit difference between 0.001 and 0.0001, which results in a log-transformed difference of 1, equals fully one eighth of the data range. *See* Opp. Ex. D ¶¶29, 36. Thus, the difference is in fact substantial.

⁷ Dr. Cowan never advocates including each and every sample in the PCA, *see* Opp. at 16, only that having set out sample-selection criteria, Dr. Olsen ought to have followed them, which would have resulted in a larger dataset and different results. *See* Mot. at 23-25.

⁸ Dr. Olsen's response misleadingly focuses on solids rather than water data, which was the focus of Defendants' criticism. *Compare* Opp. Ex. A ¶26 with, Mot. at 13-14.

3. Dr. Olsen’s determinations associating particular PC scores with particular sources are inherently subjective and unreliable.

Plaintiffs do not dispute that Dr. Olsen’s ultimate conclusion reflects nothing more than his own subjective determinations. *See* Mot. at 11-14. Instead, they defend these as based on “spatial analysis, contamination gradients and the chemical composition of known waste.” Opp. at 11. Of these, there is no mention of a “contamination gradients” analysis in Dr. Olsen’s report. *See* Mot. Ex. 2 at 6-54 (referencing only “comparison” and “spatial” analyses). The “comparison” analysis is biased and unreliable as Dr. Olsen began with analytes he decided were associated with poultry litter, and supplied values for these that were missing. *See* Mot. at 21-22 & Ex. 2 at 6-35. And, Plaintiffs’ defense of the “spatial analysis” underscores Dr. Olsen’s shifting rationales. *See* Mot. at 12-14; Opp. at 11-12.

Plaintiffs first attack Dr. Johnson for having used “preliminary” and “out of date” poultry house density data. *See* Opp. at 12 & Ex. A ¶22. But Dr. Johnson used the only poultry house density map appended to Dr. Olsen’s Rule 26 Report, Figure 2.5-1, which purported to show densities for over 300 sub-basins in the IRW. *See* Mot. at 12; Ex. 3 (Johnson Dep.) at 299:21-300:5; Ex. 5 (Figure 2.5.1). Dr. Olsen acknowledged receipt of this data from Dr. Fisher, but otherwise refused to confirm what data he relied upon for his spatial analysis. *See* Ex. 6 (Olsen Dep.) at 322:18-327:22. Dr. Olsen has never updated or amended this “preliminary” and “out-of-date” map. Yet, Plaintiffs now assert that Dr. Johnson should have relied on poultry house density data that Plaintiffs produced for the first time during Dr. Johnson’s February 24-25, 2009, deposition. *See* Opp. Ex. A ¶22 (listing exhibits). These were prepared long after Dr. Olsen’s or Dr. Johnson’s reports were submitted and should be excluded pursuant to the Court’s order regarding such exhibits. *See* Dkt. No. 1989; Ex. 3 (Johnson Dep.) at 319:7-325:13, 329:7-326:2, 331:9-332:16, 340:13-341:5, 345:24-347:5, 351:20-354:13, 361:3-14, 364:14-19, 371:17-

374:16, 380:14-382:3 (objections to new analysis relied upon in Olsen Declaration). The suggestion that Dr. Johnson should have relied on data Plaintiffs had yet to compile, as opposed to the data appended to Dr. Olsen's Rule 26 report, should be rejected.

Dr. Olsen also tries to explain away his errant Tahlequah, WWTP, and Edge-of-Field samples. *See* Mot. at 12-13; Opp. Ex. A ¶¶ 23-25. As to the first, having first purposefully misplotted these points, he now claims that new analysis performed by Dr. Fisher (slipped in during the Johnson Deposition) shows that the Tahlequah urban samples were poultry impacted. Opp. Ex. A ¶23. This, his third explanation, contradicts his prior explanation that these samples were "minor exceptions" to his subjectively-determined cutoff. Mot. at 13. With regard to the WWTP samples, Dr. Olsen similarly ignores his prior statements that these should not have been plotted as poultry impacted, *see* Mot. at 13; Ex. 6 (Olsen Dep.) at 274:15-275:6, 335:16-336:16, and now claims (based on new analysis and fieldwork) that these samples were also poultry impacted. *See* Opp. Ex. A ¶25. Thus, Dr. Olsen contorts his explanations to support his thesis.

Perhaps most creative is Dr. Olsen's excuse for cattle edge-of-field samples that inconveniently exceed his poultry impact threshold. *See* Mot. at 14. Plaintiffs gathered these samples from the Fite farm, where they confirmed that no poultry litter had ever been applied, specifically to measure cattle-impacted runoff. *See* Ex. 6 (Olsen Dep.) at 52:5-54:13; Ex. 7 at STOK005374 (Plaintiffs' field notes stating field "has never been applied with poultry waste"); Ex. 5 (Olsen density map showing no poultry activity in this area). After these samples plotted squarely within Dr. Olsen's "poultry impact" area, multiple PCA runs failed to identify a data combination to separate them. *See* Mot. at 13-14. So instead, Dr. Olsen now asserts (again based on new fieldwork and analysis introduced during the Johnson deposition) that these samples were neither cattle-impacted nor edge-of-field, but in fact were tainted by a poultry-impacted spring. *See* Opp. Ex. A ¶24; Ex. H ¶¶12-13. Of course, neither of the two Fite farm

spring samples gathered in 2006 and included in SW17 had a PC1 score over 1.3. *See* Mot. Ex. 2 Apx. F at SW17-11 (SPR-Fite500:8/10/2006; SRP-Fite501:8/10/2006). Dr. Olsen therefore gathered new samples in November 2008, long after his report had been served, *see* Ex. 8 (field notes & photos), and now claims that one of these springs impacts the original sample area (but without supporting PC scores). *See* Opp. Ex. A ¶24. This again contradicts the record.

Plaintiffs' photos of the original EOF sampling show samples collected from a large pond, *see* Ex. 9, but the November 2008 samples came from a spring some distance away that produced so little water that Plaintiffs had to dig a trough to gather a single muddy sample, *see* Opp. Ex. H ¶12; Ex. 8 (field notes & photos). Either Ed Fite's field is truly so "very different than other fields in the IRW," Opp. Ex. A ¶24, that a trickle of spring water overwhelms a history of cattle use, or Dr. Olsen is simply shifting his "spatial analysis" to match his desired results.

4. Dr. Olsen's math error was significant, and fixing it does not cure his PCA.

Dr. Olsen admits that the math error addressed in his third errata invalidated his PC scores, *see* Mot. at 15-16, but asserts that this error was harmless because the original and revised calculations resulted in similar-looking scores plots, and a similar percentage of poultry impacted samples. *See* Opp. at 12-13; Opp. Ex. A ¶28. But such "eyeballing" ignores the fact that beneath the scores plot and averages, dozens of samples changed classifications in a non-uniform manner across the IRW, showing that the error did in fact affect the results. *See* Mot. Ex. 12 ¶¶8-9.⁹ Moreover, Dr. Olsen failed to correct the error as to any of his runs except SW3

⁹ Nor did Defendants' experts bless this conclusion at their depositions as Plaintiffs' claim. *See* Opp. at 11-12. Defendants' experts' compelled participation in Plaintiffs' "connect-the-dots" exercise on exhibits prepared and newly produced by Plaintiffs at each deposition says nothing as to the accuracy or conclusions drawn from those papers. Moreover, Plaintiffs suggest that each diagram demonstrates impacts from three single source, poultry, WWTP, and reference samples. In fact, plaintiff counsel represented that the WWTP samples were "pure ... effluent" Ex. 3 (Johnson Dep.) at 194:3-7). But Dr. Olsen has admitted that both his EOF and WWTP samples reflect multiple sources. *See* Ex. 6 (Olsen Dep.) at 61:19-25; Opp. Ex. A ¶25.

and SW17. *See* Mot. Ex. 12 ¶7. His “sensitivity” and “investigatory” runs are thus uniformly incorrect. And in any event, fixing the error does nothing to fix the underlying data, methodological, and execution flaws Defendants have pointed out.¹⁰

5. Dr. Olsen’s PCA Analysis is not corroborated by fate and transport analysis

Despite many statements to the contrary, *see* Mot. at 17-18, Plaintiffs now attempt to redefine their entire expert case as “fate and transport analysis.” Opp. at 13-14 & Ex. A ¶17. Putting Plaintiffs’ semantic games aside, this flatly contradicts Dr. Olsen’s deposition testimony:

Q. Specifically how did you account for the differences in fate and transport via surface water pathways as compared, for instance, to groundwater pathways?

A I didn’t have to in the principal component analysis. It gives me a chemical analysis at a particular spot, and if I still see the constituents and it has a particular score, then it’s impacted. [W]e’re looking at individual samples and individual locations and see what we have there, so you don’t have to account for the fate and transport.

Ex. 6 (Olsen Dep.) at 565:17-566:6. Thus, Dr. Olsen’s analysis relies only on static snapshots. No matter how he characterizes Plaintiffs’ experts’ various analyses, the fact remains that Dr. Olsen never studied alternate sources of most of the constituents in his PCA, *see* Mot. at 16-19, and simply assumes, without basis, that this allegedly unique suite of constituents moves through the environment together in fixed proportions. *See* Mot. at 17-18.¹¹ As explained out in Defendants’ motion, as presented to the Court previously, and as argued to the 10th Circuit, these propositions are not sustainable. Dr. Olsen’s PCA should be excluded.

¹⁰ Dr. Olsen conceals a second error, the failure to use data transformations to minimize the effect of drastically different sample concentrations. Dr. Johnson noted this failure. *See* Mot. Ex. 7 at 60. In response, Dr. Olsen asserts that such transformations are inappropriate and that he never intended to do so. *See* Opp. Ex. A ¶10. But this contradicts Dr. Olsen’s claim in his Rule 26 where he justified the use of log-transformations in part based on his mistaken belief that such would “minimize the affect of highly variable concentrations.” Mot. Ex. 2 at 6-41. Thus, he did intend to do such a calculation, but just used the wrong tool.

¹¹ Despite Plaintiffs’ repeated appeals to the “weight of evidence,” their experts’ separate analyses must individually be reliable and admissible. *See* Dkt. No. 2030 at 1 n.2 (May 5, 2009).

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I also hereby certify that I served the attached documents by United States Postal Service,
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